

CLAIMS

What is claimed is:

1. A battery arrangement for supplying electrical power from batteries to a battery-powered electronic device, the battery arrangement comprising:
5 a first receptacle;
a second receptacle, each of the first and second receptacles being adapted to receive at least one battery; and
an electrical circuit connecting the first and second receptacles in a parallel electrical arrangement and extending between the first and second receptacles and the
10 battery-powered electronic device.
2. The battery arrangement of claim 1, wherein a battery of the first receptacle is removeable during operation of the battery-powered electronic device, and wherein the battery arrangement continuously supplies electrical power to the battery-powered
15 electronic device during removal of a battery of the first receptacle.
3. The battery arrangement of claim 2, wherein a battery of the second receptacle is removeable during operation of the battery-powered electronic device, and wherein a battery of the first receptacle supplies electrical power to the battery-powered
20 electronic device when a battery of the second receptacle is removed and a battery of the second receptacle supplies electrical power to the battery-powered electronic device when a battery of the first receptacle is removed.
4. The battery arrangement of claim 1, wherein each of a battery of the first
25 receptacle and a battery of the second receptacle has a charge, and further comprising an indicator in communication with the first and second battery receptacles, the indicator generating an alert when a charge of a battery of the first receptacle is low or when a charge of a battery of the second receptacle is low.
- 30 5. The battery arrangement of claim 1, wherein the first and second receptacles are sized to receive AA batteries.

6. The battery arrangement of claim 1, wherein each of the first and second battery receptacles is adapted to support at least two batteries, and wherein the electrical circuit selectively supplies electrical power to the battery-powered electronic device from batteries of the first receptacle and batteries of the second receptacle.

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7. The battery arrangement of claim 1, wherein the battery-powered electronic device includes a clock having a changeable time, and wherein a battery of the first receptacle and a battery of the second receptacle are replaceable without interrupting the time of the clock.

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8. The battery arrangement of claim 1, wherein each of a battery of the first receptacle and a battery of the second receptacle has a useful life, and wherein the electrical circuit supplies electrical power to the battery-powered electronic device from batteries of the first and second receptacles for a period of time to increase a useful life of a battery of the first receptacle and a useful life of a battery of the second receptacle.

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9. The battery arrangement of claim 1, further comprising a third receptacle adapted to receive at least one battery, the electrical circuit further connecting the third receptacle in a parallel electrical arrangement with the first and second receptacles.

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10. A battery arrangement for supplying electrical power from batteries to a battery-powered electronic device, the battery arrangement comprising:

a first receptacle;

a second receptacle, each of the first and second receptacles being adapted to receive batteries; and

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an electrical circuit electrically connecting the first and second receptacles and the battery-powered electronic device for transmitting electrical power to the battery-powered electronic device, the transmission of electrical power to the battery-powered electronic device being uninteruptable during replacement of a battery of the first receptacle and during replacement of a battery of the second receptacle.

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11. The battery arrangement of claim 10, wherein a battery of the second receptacle supplies electrical power to the battery-powered electronic device during replacement of a battery of the first receptacle and a battery of the first receptacle supplies electrical power to a battery-powered electronic device during replacement of a battery of the second receptacle.

12. The battery arrangement of claim 10, wherein each of a battery of the first receptacle and a battery of the second receptacle has a charge, and further comprising an indicator in communication with the first and second battery receptacles, the indicator generating an alert when a charge a battery of the first receptacle is low or when a charge of a battery of the second receptacle is low.

13. The battery arrangement of claim 10, wherein the first and second receptacles are sized to receive AA batteries.

14. The battery arrangement of claim 10, wherein each of the first and second receptacles is adapted to support at least two batteries, and wherein the electrical circuit selectively supplies electrical power to the battery-powered electronic device from batteries of the first receptacle and batteries of the second receptacle.

15. The battery arrangement of claim 10, wherein the battery-powered electronic device includes a clock having a changeable time, and wherein the changeable time is uninterrupted during replacement of a battery of the first receptacle and during replacement of a battery of the second receptacle.

16. The battery arrangement of claim 10, wherein each of a battery of the first receptacle and a battery of the second receptacle has a useful life, and wherein the electrical circuit supplies electrical power to the battery-powered electronic device from batteries of the first and second receptacles for a period of time to increase a useful life of a battery of the first receptacle and a useful life of a battery of the second receptacle.

17. The battery arrangement of claim 10, further comprising a third receptacle adapted to receive at least one battery, the electrical circuit further connecting the third receptacle in a parallel electrical arrangement with the first and second receptacles.

5 18. A battery arrangement for supplying electrical power from batteries to a battery-powered electronic device, the battery arrangement comprising:
 a first receptacle;
 a second receptacle, each of the first and second receptacles being adapted to receive batteries; and
10 an electrical circuit connecting the first and second receptacles and extending between the first and second receptacles and the power consuming device to selectively supply electrical power to the power consuming device from one of a battery of the first receptacle and a battery of the second receptacle.

15 19. The battery arrangement of claim 18, wherein the electrical circuit connects the first and second battery receptacles in a parallel electrical arrangement.

 20. The battery arrangement of claim 18, wherein a battery of the second receptacle supplies electrical power to the battery-powered electronic device during
20 replacement of a battery of the first receptacle and a battery of the first receptacle supplies electrical power to the battery-powered electronic device during replacement of a battery of the second receptacle.

 21. The battery arrangement of claim 18, wherein each of a battery of the first
25 receptacle and a battery of the second receptacle has a charge, and further comprising an indicator in communication with the first and second battery receptacles, the indicator generating an alert when a charge of a battery of the first receptacle is low and when a charge of a battery of the second receptacle is low.

30 22. The battery arrangement of claim 18, wherein the first and second receptacle are sized to receive AA batteries.

23. A battery arrangement for supplying electrical power from batteries to a battery-powered electronic device, the battery arrangement comprising:

a first receptacle;

a second receptacle;

5 a third receptacle;

a fourth receptacle, the first, second, third, and fourth receptacles being adapted to receive batteries; and

an electrical circuit having a first path connecting the first and second receptacles and a second path electrically connecting the third and fourth receptacles, the first and second paths being in a parallel electrical arrangement and being electrically
10 connected to the battery-powered electronic device.

24. The battery arrangement of claim 23, wherein when a battery is removed from one of the first receptacle and the second receptacle, the second path electrically
15 connects batteries of the third and fourth receptacles to the battery-powered electronic device.

25. The battery arrangement of claim 23, further comprising a third path electrically connecting the first and fourth receptacles and being electrically connected to
20 the battery-powered device, the third path and at least one of the first and second paths being in a parallel electrical arrangement.

26. The battery arrangement of claim 25, further comprising a fourth path electrically connecting the second and third receptacles and being electrically connected to
25 the battery-powered device, the fourth path and at least one of the first and second paths being in a parallel electrical arrangement.